



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/759,913      | 01/12/2001  | David P. Biss        | 176/60930           | 2814             |

7590 10/20/2004  
Gunnar G. Leinberg, Esq.  
NIXON PEABODY LLP  
Clinton Square  
P.O. Box 31051  
Rochester, NY 14603

EXAMINER

SHAFFER, RICKY D

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2872     |              |

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                             |  |
|------------------------------|-------------------------------|-----------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>09/759,913 | Applicant(s)<br>BISS ET AL. |  |
|                              | Examiner<br>Ricky D. Shafer   | Art Unit<br>2872            |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-87 is/are pending in the application.
- 4a) Of the above claim(s) 1-61, 67-76 and 82-87 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 62-66 and 77-81 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>05/08/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 62 and 77 are rejected under 35 U.S.C. 102(b) as being anticipated by Tabata ('717).

Tabata discloses a microscope comprising a source (16) for a homogeneously polarized input optical beam, a polarization converter (68) which produces an inhomogeneously polarized optical beam from the homogeneously polarized input optical beam and a microscopic imaging system (9, 30) which captures an image of a sample (5) using the inhomogeneously polarized optical beam. Note Fig. 22 along with the associated description thereof.

3. Claims 62 and 77 are rejected under 35 U.S.C. 102(b) as being anticipated by Kitagawa ('591).

Kitagawa discloses a microscope comprising a source [(11,13),(51,33)] for a homogeneously polarized input optical beam, a polarization converter (8,37) which produces an inhomogeneously polarized optical beam from the homogeneously polarized input optical beam and a microscopic imaging system (24, 45) which captures an image of a sample using the inhomogeneously polarized optical beam. Note Figures 1 and 7 along with the associated description thereof.

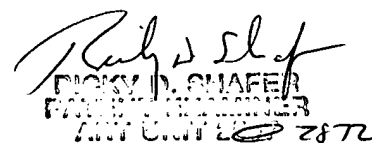
Art Unit: 2872

4. Claims 62-66 and 77-81 are rejected under 35 U.S.C. 102(a) as being anticipated by Youngworth et al.

Youngworth et al discloses a discloses a microscope comprising a source (the HeNe laser and linear polarizers) for a homogeneously polarized input optical beam; a polarization converter (the Mach-Zehner Linear-Azimuthal Polarization Converter) including a first polarization beam splitter (the polarizing B/S adjacent the source) which splits the homogeneously polarized input beam into first and second parts, first and second phase shifters (the phase retarders), a variable delay and a second polarization beam splitter (the polarizing B/S furthest from the laser) which combines the first and second parts to produce an inhomogeneously polarized optical beam; and a microscopic imaging system (the detector) which captures an image of a sample (Sample) using the inhomogeneously polarized optical beam. Note by example only Figure 4 and 5 along with the associated description thereof.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricky D. Shafer whose telephone number is (571) 272-2320. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RDS // October 18, 2004

  
RICKY D. SHAFER  
PATENT EXAMINER  
ART UNIT 2872